



## Assessment of Ecotourism Management of Lekki Conservation Centre, Lagos State Nigeria

ONIHUNWA, JO; \*AKANDE, OA; MOHAMMED, HL; JOSHUA, DA

*Federal College of Wildlife Management, New-bussa Niger State Nigeria*

\*Corresponding Author Email: [akandehmd@gmail.com](mailto:akandehmd@gmail.com); \*Tel: 08035179759

Co-Authors Email: [onihunwa.kayode@gmail.com](mailto:onihunwa.kayode@gmail.com); [mohammedlaraba@gmail.com](mailto:mohammedlaraba@gmail.com); [dajoshua@gmail.com](mailto:dajoshua@gmail.com)

**ABSTRACT:** The study assessed ecotourism management of Lekki Conservation Centre, Lagos state. Data was collected through questionnaire, interview and personal field observation. Data obtained was analyzed using descriptive statistics. The demographic characteristics of the respondents revealed that females recorded the highest (66.0%) with 25-34 years (38.0%). The result also revealed that most of the respondents (74.0%) are single. It was also noted that 46.0% of the respondents had attained tertiary level of education. Also majority of the respondents (58.0%) are Muslims while 42.0% are Christians. The finding further revealed that 44.0% of the respondents are civil servant. The travel characteristics of the respondents showed that majority were first time visitors (68.0%) and that majority of the visitors travelled with their family and friends (54.0%) While most of the visitors got to know about the centre through their friends and family (68.0%). Eight (8) ecotourism attractions are observed in Lekki conservation centre. The total revenue generated in the study area from 2010 to 2019 was ₦ 130,075,465. Year 2019 recorded the highest number of tourist with 9412 tourists, followed by 2017 with 6,530 tourists while year 2010 recorded the least number of tourist influx with 1,661 tourists. The management practices of Lekki Conservation Centre are availability of tour guide, adequate parking space, adequate security and ease of entrance etc. The study concludes that the site has enough attractions to motivate visitors to visit especially the Canopy walkway which is the longest canopy walkway in Africa.

DOI: <https://dx.doi.org/10.4314/jasem.v27i7.1>

**Open Access Policy:** All articles published by **JASEM** are open access articles under **PKP** powered by **AJOL**. The articles are made immediately available worldwide after publication. No special permission is required to reuse all or part of the article published by **JASEM**, including plates, figures and tables.

**Copyright Policy:** © 2023 by the Authors. This article is an open access article distributed under the terms and conditions of the **Creative Commons Attribution 4.0 International (CC-BY- 4.0)** license. Any part of the article may be reused without permission provided that the original article is clearly cited.

**Cite this paper as:** ONIHUNWA, J. O; AKANDE, O. A; MOHAMMED, H. L; JOSHUA, D. A (2023). Assessment of Ecotourism Management of Lekki Conservation Centre, Lagos State Nigeria. *J. Appl. Sci. Environ. Manage.* 27 (6) 1331-1336

**Dates:** Received: 07 June 2023; Revised: 18 June 2023; Accepted: 27 June 2023 Published: 06 July 2023

**Keywords:** Conservation, Ecotourism, Lekki, Management

Ecotourism also known as ecological tourism, has been a growing phenomenon since the 1950s and 1960s as the First World grew in its appreciation of nature and its vulnerability to human development and population growth (Roche and Wallington, 2014). It has become one of the fastest-growing sectors of the tourism industry, growing annually by 10–15% worldwide (Miller, 2001). Although no precise figures exist, it has been estimated that probably around 15 or 20% of all international tourism is ecotourism (Miller, 2001). The rate of growth of ecotourism and other nature-based tourism activities seems to be the highest of all tourism segments, maybe around 15% per year (Ceballos-Lascurain, 2001). For many countries, ecotourism is not simply a marginal activity to finance

protection of the environment, but is a major industry of the national economy (TNC, 2015; Roche and Wallington, 2014). Ecotourism is that segment of sustainable tourism which is related to visitation of relatively undisturbed natural areas, including protected areas. It involves travelling to areas where environment is unspoiled, climate is pleasant, natural resources are sustained and cultural diversity is conserved (Subbiah and Kannan, 2012). The Ecotourism Society defines ecotourism as “purposeful travel to natural areas to understand the cultural and natural history of the environment; taking care not to alter the integrity of the ecosystem; producing economic opportunities that make the conservation of natural resources beneficial to local people”. It is

\*Corresponding Author Email: [akandehmd@gmail.com](mailto:akandehmd@gmail.com)

intended to offer tourists insight into the impact of human beings on the environment, requires lowest possible consumption of natural resources, foster a greater appreciation of our natural habitats and to respect local cultures of destinations visited. In its ideal form, ecotourism curtail the deleterious impacts that are associated with mass tourism. Nigeria is a country rich in biodiversity and diverse natural landscapes (Osunsina *et al.*, 2008). The tourism industry is one of the sectors that Nigerian government is shifting its attention in the face of recent economic challenges facing the country. The rich potentials in Nigeria's game reserves remained one area that need to be explored. The economic potentials of using the reserves for ecotourism are enormous and deserve the attention and investment by government. Game reserve, Sanctuary and National parks possess ample potentials for recreation and eco-tourism. Lekki Conservation Centre (LCC), is a nature reserve owned and managed privately, it was established in the year 1990 with the sole aim to conserve and protect biodiversity of the Lekki Peninsula. NCF (2008) ascertain that LCC educate and create awareness on natural resources and environmental management in Nigeria. Although eco-tourism was an integral part of the objectives that led to the establishment of the Lekki conservation center, its eco-tourism capacity and potentials are yet to be fully harnessed (Adetola and Adetula, 2020). The study area has been reported to attract an average of 1000 tourists annually, with the potential of promoting sustainable development and creating considerable income for adjacent communities (NCF, 2008). However, literatures abound on the perception and motivation of tourist at Lekki Conservation Center but a dearth information on ecotourism management of the area. Therefore this study is necessary as it will bridge the information gap for the sustainable management of ecotourism in the center.

## MATERIAL AND METHODS

Lekki Conservation Centre (LCC) was established in 1990 by Chevron Corporation for the Nigerian Conservation Foundation (NCF). The conservation centre is located between latitude 6°52' and 3°54' north of the Equator and longitude 2°45' and 4°20' east of the Greenwich Meridian. In the year 2014, the number of tourists in LCC rose to approximately 28,139 visitors.

(Nigerian Conservation Foundation, 2016). Lekki Conservation Centre is in Eti-Osa Local Government Area of Lagos State, Nigeria, with other commercial municipalities surrounding the area, and prospects for marine tourism. The southern part of Eti-Osa is bounded by the Atlantic Ocean, the east is bounded by Ibeju-Lekki, the north by Lagos Lagoon and part of

Lagos Mainland and Lagos Island, while the western part of Eti-Osa is bounded by Ojo. Eti-Osa has a population of 983,515 with a population density of 4,506 persons per km<sup>2</sup> – 2016 projections (Lagos Bureau of Statistics, 2016), and a total area of 299.1 km<sup>2</sup> (Salako *et al.*, 2018).

*Method of Data Collection:* Field observation, interview and questionnaires were used to elicit information from the staff of Lekki Conservation Centre (LCC) and tourist. Fifty (50) copies of questionnaire was accidental administer to the tourist. The record of ecotourism visitation of the centre was examined to obtain information on tourist influx and revenue generated from 2010-2019.

*Data Analysis:* Data obtained from the study was analyzed using descriptive statistics that is frequency tables, charts and bars.

## RESULTS AND DISCUSSION

Table 1 presents the demographic characteristics of the respondents at Lekki Conservation Centre (LCC). Highest percentage of the respondents was females (66.0%) while male recorded 34.0%. Also, highest percentage of the respondents was within the youthful and young age of 25-34 years (38.0%), followed by age group 15-24 years with 28.0%. The table also revealed that most of the respondents (74.0%) are single while 26.0% are married. It was also noted that 46.0% of the respondents had attained tertiary level of education. Also majority of the respondents (58.0%) are Muslims while 42.0% are Christians. The table further revealed that 44.0% of the respondents are civil servant, followed by student with 32.0%. Majority of the respondents (48.0%) earned ₦51,000-100,000. Overwhelming number of respondents living within Lagos (58.0%).

Table 2 presents the travel characteristics of the respondents, it was reveal that majority were first time visitors (68.0%) and that majority of the visitors travelled with their family and friends (54.0%) While most of the visitors got to know about the centre through their friends and family (68.0%). The ecotourism attractions available in Lekki conservation centre are presented in table 3, in which eight (8) attractions are observed.

Yearly internally generated revenue by Lekki Conservation Centre is presented on Figure 1. It was observed that there had been instability in the revenue generated from 2010 to 2019. The highest revenue generated in the centre in a year was ₦18,145,328 in 2019 while the lowest revenue generated in the last ten years was ₦5,562,815 in 2010.

**Table 1:** Socio-Demographic Factors of the Respondents

Socio-Demographic	Variable	Respondents	Percentage (%)
<b>Gender</b>	Male	17	34.0
	Female	33	66.0
<b>Age Group</b>	15-24	14	28.0
	25-34	19	38.0
	35 and 44	10	20.0
	45 and Above	7	14.0
<b>Marital Status</b>	Single	37	74.0
	Married	13	26.0
<b>Level of Education</b>	No-formal Education	5	10.0
	Primary Education	8	16.0
	Secondary Education	14	28.0
	Tertiary Education	23	46.0
	Student	16	32.0
<b>Religion</b>	Christianity	21	42.0
	Muslims	29	58.0
	Traditional	-	-
<b>Major Occupation</b>	Civil Servant	22	44.0
	Artisanal/business	12	24.0
	50,000	9	18.0
<b>Income Per Month (₦)</b>	51,000-100,000	24	48.0
	≥101,000	17	34.0
	Lagos	29	58.0
<b>Residency</b>	Outside Lagos	15	30.0
	Foreign	6	12.0
	<b>Total</b>	<b>50</b>	<b>100.0</b>

Source: Field Survey, 2021

The total revenue generated in the study area from 2010 to 2019 was ₦ 130,075,465. The tourist influx for a period of 2010-2019 was revealed in fig 2, the total tourist for the period is 43,143 tourists, in which year 2019 recorded the highest number of tourist with 9412 tourists, followed by 2017 with 6,530 tourists while year 2010 recorded the least number of tourist influx with 1,661 tourists. Also year 2019 recorded the highest number of domestic tourist with 8991 while year 2010 also recorded the least with 1503. Year 2019 recorded the highest number of foreign tourist with 421 individual, followed by year 2017 with 303 individuals while year 2010 recorded the least number of foreign tourist (158 tourist).

The management practices of Lekki Conservation Centre are indicated in table 3, it was observed that availability of tour guide and adequate parking space scores the highest mean of 4.91 and 4.87 each, followed by adequate security and ease of entrance with a mean of 4.82 and 4.74 each, while demarcation and standard visitor accommodation recorded the least mean of 4.13 each.

**Table 2:** Travel Characteristics of Respondents

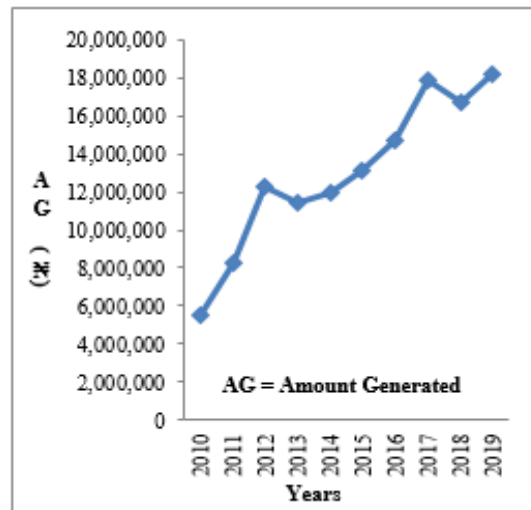
Travel Characteristics	Variable	Respondents	Percentage (%)
<b>Number of Visit</b>	First Time	34	68.0
	Twice	13	26.0
	More than Twice	3	6.0
<b>Visitation Group</b>	Alone	14	28.0
	With spouse	9	18.0
<b>Source of Awareness</b>	With family and friends	27	54.0
	Friends and Family	34	68.0
	Internet	11	22.0
	Tv and Radio	5	10.0
	<b>Total</b>	<b>50</b>	<b>100.0</b>

Source: Field Survey, 2021

**Table 3:** Ecotourism Attractions of Lekki Conservation Centre (LCC)

S/N	Attractions
1	Bird Watching
2	Canopy Walk
3	Tree House
4	Jungle Trek
5	Nature Walk
6	Wildlife Viewing
7	Playing Game
8	Nature Station

Source: Personal Observation, 2021



**Fig 1:** Internally Generated Revenue by Lekki Conservation Centre in 2010-2019

Source: Administrative Records, 2021

These studies revealed that majority of the respondents were females which supports the findings of Chen-Yu *et al.* (2010) who claims that in Jonkoping, 57.3% of respondents were females while 42.7% were males. Also it is contradictory to the assertion that men are more likely to participate in adventure activities (Xie *et al.*, 2008). Highest percentage of the visitors were within youthful age of 25-34 years which shows they

are within their active age for recreational activities as Age is reported to have positive influence on individual's desire for relaxation and nature exploration (Ma *et al.*, 2018). This finding conforms to Ryan *et al.* (1998) who revealed that tourists who desired interactive experiences in tourist destinations were more likely to be young. Richards (2015) also confirmed that there is an increase in the number of youth tourists and that young people in many countries around the world have recently acquired more purchasing power. Furthermore, highest singles living within the destination's city which shows they did not have to travel far to get in order to visit the tourist destination as supported by Biernat and Lubowiecki-Vikuk (2012) that singles prefer shorter but frequent trips. It is also in agreement with the findings of Bitrus (2014) who reported that majority of tourists that visit tourism destinations in Jos are between ages 21-39, more than half of the tourists are single. Most of the visitors were also civil servants and earning high income which is a clear indication they could afford recreational activities' cost.

friends and family meaning a positive word of mouth from friends and relatives has an effect on a potential visit to a destination as supported by Veiga *et al.* (2017) that travellers depend on their peers' appreciation when forming their own opinions and making travel decisions, often using reviews as a crucial complement to decision-making. Lekki Conservation centre possesses a lot of great attractions capable of entertaining visitors which includes canopy walkway, nature station, wildlife viewing, Bird watching, games, tree house, jungle trek. These attractions contribute to the good destination image of the site attracting both local and foreign visitors. Canopy walkway which is an attraction at the site was responsible for the visit of most of the visitors during this study. These attractions pull visitors to the site and are classified as pull motivations as defined by Pansiri (2014) that pull motivation refers to the supply of the attraction and the characteristics of the destination. Karanth and DeFries (2010) also stated that protected areas and parks are the main visitor attractions of nature-based tourist attractions across countries. Adventure, sightseeing, relaxation and rest were highly ranked as factors motivating the visitors to visit the ecotourist site as this site offers facilities that encourage such activities (Karanth and DeFries, 2010). Williams and Baláz (2015) support this assertion by stating that some young adventure tourists look for risk and adventure to reinforce their identity or simply because of sensation seeking. Todorovic and Jovicic (2016) also argued that the main reason for embarking on holidays is that visitors look for a break from their usual schedule and settings that allow them to relax and lessen mental fatigue.

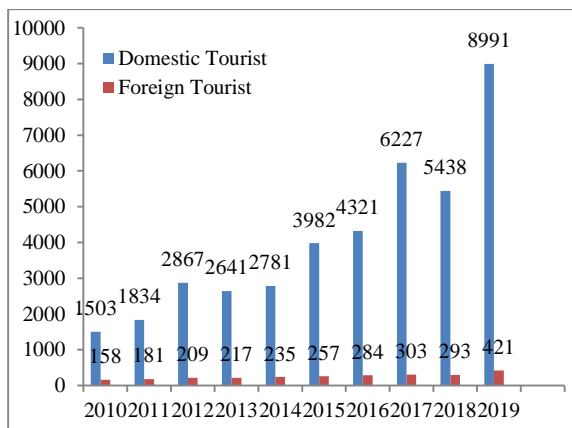


Fig 2: Tourist Influx of Lekki Conservation Centre for the period of 2010-2019

Source: Administrative Records, 2021

Table 3: Management Practices of Lekki Conservation Centre

Management Practices	Mean	Standard Deviation	Rank
Existence of tourist litter	4.51	0.73	5 <sup>th</sup>
Adequate security	4.82	0.39	3 <sup>rd</sup>
Standard visitor accommodation	4.13	1.01	7 <sup>th</sup>
Ease of entrance	4.74	0.52	4 <sup>th</sup>
Availability of tour guide	4.91	0.25	1 <sup>st</sup>
Adequate parking space	4.87	0.31	2 <sup>nd</sup>
Demarcation	4.44	0.81	6 <sup>th</sup>

Source: Field Survey, 2021.

The visitors were mostly first time visitors who had travelled with their family and friends to spend few hours at the site. This is consistent with Chan *et al.* (2018) who found out in his study that companions during visits were family and friends. The major source of awareness of this tourist site was through

Revenue generation from 2010 to 2019 shows that a total of ₦ 130,075,465 was generated. The major sources of revenue for the centre include: park entry, accommodation and catering service fees as well as proceeds from sales of souvenirs. Invariably, tourist flow for a given year may not necessarily determine the level of revenue generated from ecotourism. On the contrary, tourists' expenditure and spending in the centre will go a long way at influencing the scale of revenue generation from the exercise. Clearly, the proceeds from wildlife tourism to conservation activities has gone a long way in contributing to the management of centre which corroborate with Meduna *et al.*, (2005) which reported that revenue generated from National Parks can be use to manage Nigerian National Parks, especially in times of inadequate funding from the federal government. This underscores the potential of wildlife tourism towards generating substantial resources for both conservation and economic development. This is also significant given that protected areas are under increasing

pressure to provide economic justification for their existence (Balmford *et al.*, 2009).

The management practices of Lekki Conservation Centre are availability of tour guide, adequate parking space, existence of tourist litter, adequate security and ease of entrance etc. This conforms with Sangpikul, (2020) that ascertain that tourists recognize tour guidance as an important element in the tourism experience, hence the necessity of putting tour guidance in the mix should not be underemphasized. Also, Krelling *et al.* (2017) reported that existence of tourist litter are very crucial in a destination because destination loyalty of various categories of tourists to the existence of debris, in which a significant rise in beach debris forced beach tourists to look elsewhere when searching for a vacation in a coastal region. Nwokorie *et al.* (2014) and Santos *et al.* (2018) indicated security as a major determinant of destination loyalty. Fortunately for the present study, the perception of respondents on the security status of LLC is significantly positive.

*Conclusion:* The study concludes that the site has enough attractions to motivate visitors to visit especially the Canopy walkway which is the longest canopy walkway in Africa among other attractions like tree house, wildlife viewing, and games. The management practices of Lekki Conservation Centre are availability of tour guide, adequate parking space, existence of tourist litter, adequate security and ease of entrance etc. The study recommends that there is need to improve upon the state of facilities in the Centre and orient these towards meeting visitors' needs.

## REFERENCES

- Adetola, B.O and Adetula, C.T. (2020). Patronage characteristics and experiences of domestic and international tourists at Lekki conservation centre, southwest Nigeria. *FUTOJNLS* 6(1), 173-188.
- Balmford, A., Bresford, J., Green, J., Naidoo, R., Walpole, M. and Manica, A. (2009). A Global Perspective on Trends in Nature-Based Tourism. *PLoS Bio* 7 (6): 1-6.
- Biernat, E. and Lubowiecki-Vikuk, A. (2012), "Tourist activity among urban singles in view of sociodemographic factors. Leisure and recreation. *Stud. Phys. Cult. Tour.* 19 (2): 86-93.
- Bitrus, S. (2014). Analysis of the patronage characteristics of tourism destinations in Jos. M. Sc. Ahmadu Bello University, Nigeria. 97.
- Ceballos-Lascurain, H. (2001). Integrating Biodiversity into the Tourism Sector: Best Practice Guidelines. <http://www.planeta.com/ecotravel/mexico/strategy/biodiversity3.htm> 1
- Chan, L., Yeh, N. and Tung, T. (2018), "How do motivation, pre-visit information search, and destination image affect post visit behavior intentions?, the case of an Island destination", *Eur J. Tour .Res.* 9, 8-23.
- Chen-yu, Chung-Shing, Siu Kan Yuen, Xialei Duan and Lawal M. Marafa (2010). An analysis of push-pull motivations of visitors to Country Parks in Hong Kong, *World Leisure Jour*, 60 (3): 191-208
- Karant, and DeFries. (2010). Nature-based tourism in Indian protected areas: New challenges for park management. *Conserv. Letters*, 4(2), 137-149.
- Krelling, A.P., Williams, A.T., Turra, A. (2017). Differences in Perception and Reaction of Tourist Groups to Beach Marine Debris that can Influence a Loss of Tourism Revenue in Coastal Areas. *Marine Policy* 85, 87-99.
- Ma, A., Chow, A., Cheung, L., Lee, K. and Liu, S. (2018). "Impacts of tourists' socio-demographic characteristics on the travel motivation and satisfaction: the case of protected areas in South China", *Sustainability*, 10 (10), 3388.
- Meduna, A.J., Amusa, T.O., Ogunjinmi, A.A. and Ibeun, J.S. (2005). Environmental Friendly Tourism in Nigeria: A Case Study of Nigerian National Park Service. *Nig. J of Forestry* 35 (1): 36-43.
- Miller, G. (2001). Corporate responsibility in the UK tourism industry. *Tour. Manage*, 22: 589-598.
- Nigerian Conservation Foundation. (NCF) (2008). *2008 Annual Report*. 32pp.
- Nigerian Conservation Foundation (2016). 2016 Annual Reports and Financial Statements. Retrieved from <https://www.ncfnigeria.org/Reports/2016%20NC%20Annual%20Report.Pdf>
- Nwokorie, E.C., Everest, D.A., Ojo, O.O. (2014). Emerging Security Challenges for Tourism Development: Effect on the Nigerian Economy. *J. of Women in Tech. Edu.* 7(2), 33-40.
- Osunsina I. O., Ogunjimi A. A. and Meduna A. J. (2008). Ecotourism Potentials of Kamuku National

- Park, Birnin-Gwari, Kaduna State. *Inter. J. Agric. Sci. Environ. Tech.* 8: (2) 231-254.
- Pansiri, J. (2014). Tourist motives and destination competitiveness: A gap analysis perspective. *Inter J of Hosp & Tour Admin*, 15(3), 217–247.
- Richards, G. (2015), “The new global nomads: Youth travel in a globalizing world. *Tour Recreation Res.* 40 (3): 340-352,
- Roche, C. and Wallington, B. (2014). What is ecotourism? (<http://www.ewt.org.za>). Downloaded 10th of April, 2023.
- Ryan, G.Y. Doe, F. and Dadzie, S.A. (1998), “The future of youth tourism in Ghana: motives, satisfaction and behavior intentions. *J. Tour. Fut.* 5 (1): 5-21.
- Salako, T.E., Oyeleke, O.O., Ogunjimi, A.A. 2018. Assessment of Guided Tour on Visitors’ Behaviour in Lekki Conservation Centre and Osun Osogbo Sacred Groove, Osogbo, Osun State. *J of Sustainable Tech* 9(1), 89-98.
- Sangpikul, A. (2020). Tourist Perceptions of Guided Ecotourism Tours in Thailand. *Tour. Hosp. Res.* 20(2), 245-256.
- Santos, C., Silva, D., Amorim, E. 2018. The Impact of Tourism Security on the Image of the Destination - The case of Portugal. *Jour of Tour. Res.* 19, 207-216.
- Subbiah, K. and Kannan, S. (2012). The Management Strategies of Ecotourism Development in Papua New Guinea. *Inter. J of Eco Bus & Manag Studies*, 1(3), 114-120.
- Todorovi, N. and Jovicic, D. (2016). “Motivational factors of youth tourists visiting Belgrade”, *CVIJIC*, 66 (2), 273-289.
- Veiga, C., Santos, M., Águas, P. and Santos, J. (2017), “Are millennials transforming global tourism? Challenges for destinations and companies”, *Worldwide Hosp & Tour Themes*, 9 (6), 603-616.
- Williams, A.M. and Baláž, V. (2015), “Tourism Risk and Uncertainty: Theoretical Reflections”, *J of Trav Res*, 54 (3), 271-287.
- Xie, H., Costa, C. and Morais, D. (2008). Gender differences in rural tourists’ motivation and activity participation. *J Hosp. Leis Mark*, 16 (4), 1-27.